## Amendment to Claims

Claim 1 (currently amended): A method of transmitting data through a mesh of data switches, the method comprising:

receiving a data frame at a first port of a receiving data switch, the data frame originating at a first MAC device and having a destination address associated with a second MAC device, the second MAC device being associated with a destination data switch in the mesh;

maintaining a data structure associating each of a plurality of destination addresses of discovered MAC devices with one of a port and an aggregation of ports on the receiving data switch;

comparing the destination address of the received data frame with the data structure to determine a match with <u>an associated</u> one of a port and aggregation of ports;

transmitting the received data frame through the mesh of data switches according to a spanning tree protocol if no match is determined; ~~and~~

~~selecting a port in the aggregation of ports for transmitting the received data frame to the destination data switch if the destination address is associated with the aggregation of ports~~

<u>receiving a message at the receiving data switch specifying a destination data switch associated with the destination address of the second MAC device;</u>

<u>associating in the data structure the destination address of the second MAC device with a transmitting port on the receiving data switch; and</u>

suspending a transition for transmission of subsequent data frames to the

second MAC device through a data path including the transmitting port to ensure a

delay from a transmission of a last data frame according to the spanning tree protocol to

a transmission of a first data frame through the data path.

Claim 2 (currently amended): The method of claim 1, the method further

comprising:

~~associating the destination address with the destination data switch; and~~

~~determining the associated port or aggregation of ports based upon the~~

~~destination data switch~~ selecting the associated one of a port and aggregation of ports

for transmitting the received data frame to the destination data switch if a match is

determined.

Claim 3 (currently amended):     The method of claim ~~1~~ 2, the method further

comprising selecting ~~a~~ one port in the aggregation of ports for transmitting the data

frame based upon one of the destination address and a source address of the received

data frame ~~associated with the first MAC device~~.

Claim 4 (cancelled).

Claim 5 (cancelled).

Claim 6 (cancelled).

Claim 7 (currently amended): A source data switch for transmitting data frames through a mesh of data switches, the source data switch comprising:

a switching fabric including a plurality of ports;

logic to maintain a data structure associating each of a plurality of destination addresses of discovered MAC devices coupled to a mesh of data switches with one of a port and an aggregation of ports of the switching fabric, each port in the aggregation of ports coupling to a data path through the mesh of switches to a MAC device having ~~the~~ one of said plurality of destination ~~address~~ addresses;

logic to compare the destination address of ~~the~~ a received data frame with the data structure to determine a match with one of a port ~~or~~ and an aggregation of ports;

~~logic to select a port from among an aggregation of ports for transmitting a data frame received at the switching fabric if the destination address of received data frame is matched with the aggregation of ports; and~~

logic to transmit the received data frame through the mesh of data switches according to a spanning tree protocol if no match is determined;

logic to receive a message specifying a destination data switch associated with the destination address of the received data frame;

logic to associate in the data structure the destination address of the received data frame with a transmitting port of the switching fabric based upon the destination data switch; and

logic to suspend a transition for transmission of subsequent data frames to the destination address of the received data frame through a data path including the

transmitting port to ensure a delay from a transmission of a last data frame according to the spanning tree protocol to a transmission of a first data frame through the data path.

Claim 8 (currently amended): The source data switch of claim 7, the source data switch further comprising~:

~~logic to associate the destination address of the received data frame with a destination data switch; and~~

~~logic to select a port from the aggregation of ports based upon the destination data switch for transmission of the received data frame~~ logic to select the associated one of a port and aggregation of ports for transmitting the received data frame to the destination data switch if a match is determined.

Claim 9 (currently amended): The source data switch of claim ~7~ 8, the source data switch further comprising logic to select a one port in the aggregation of ports for transmission of the received data frame based upon one of a the destination address and a source address of the received data frame.

Claim 10 (cancelled).

Claim 11 (cancelled).

Claim 12 (cancelled).

Claim 13 (currently amended):    A data switch controller comprising:

an interface adapted for coupling to a switching fabric, the switching fabric including a plurality of ports;

logic to maintain a data structure associating each of a plurality of destination addresses of discovered MAC devices coupled to a mesh of data switches with one of a port and an aggregation of ports of the switching fabric, each port in the aggregation of ports coupling to a data path through the mesh of switches to a MAC device having the destination address;

logic to compare the destination address of the received data frame with the data structure to determine a match with <u>an associated one of</u> a port ~~or~~ <u>and</u> aggregation of ports;

~~logic to select a port from among an aggregation of ports for transmitting a data~~ ~~frame received at the switching fabric if the destination address of the received data~~ ~~frame is matched with the aggregation of ports; and~~

logic to transmit the received data frame through the mesh of data switches according to a spanning tree protocol if no match is determined<u>;</u>

<u>logic to receive a message specifying a destination data switch associated with</u> <u>the destination address of the received data frame;</u>

<u>logic to associate in the data structure the destination address of the received</u> <u>data frame with a transmitting port of the switching fabric based upon the destination</u> <u>data switch; and</u>

<u>logic to suspend a transition for transmission of subsequent data frames to the</u> <u>destination address of the received data frame through a data path including the</u>

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transmitting port to ensure a delay from a transmission of a last data frame according to the spanning tree protocol to a transmission of a first data frame through the data path.

Claim 14 (currently amended):  The data switch controller of claim 13, the data switch controller further comprising:

~~logic to associate the destination address of the received data frame with a destination data switch; and~~

logic to select a the associated one of a port ~~from the~~ and aggregation of ports ~~based upon the destination data switch~~ for transmission of the received data frame to the destination data switch if a match is determined.

Claim 15 (currently amended):    The data switch controller of claim ~~13~~ 14, the data switch controller further comprising logic to select a one port in the aggregation of ports for transmission of the received data frame based upon one of a the destination address and a source address of the received data frame.

Claim 16 (cancelled).

Claim 17 (cancelled).

Claim 18 (cancelled).

Claim 19 (currently amended):    A data network for transmitting data frames

from a source MAC device to a destination MAC device, the data network comprising:

a destination data switch coupled to a destination MAC device;

a mesh of data switches coupled to the destination data switch for transmitting data

frames originating at a source MAC device to the destination MAC device; and

a source data switch coupled to the source MAC device including:

a switching fabric including a plurality of ports;

logic to maintain a data structure associating each of a plurality of destination

addresses of discovered MAC devices coupled to the mesh of data switches with one of

a port and an aggregation of ports of the switching fabric, each port in the aggregation

of ports coupling to a data path through the mesh of switches to a MAC device having

the destination address;

logic to compare the destination address of the received data frame with the data

structure to determine a match with <u>an associated one of</u> a port ~~or~~ <u>and</u> aggregation of

ports;

~~logic to select a port from among an aggregation of ports for transmitting a data~~

~~frame received at the switching fabric if the destination address of received data frame~~

~~is matched with the aggregation of ports; and~~

logic to transmit the received data frame through the mesh of data switches

according to a spanning tree protocol if no match is determined<u>;</u>

<u>logic to receive a message specifying a destination data switch associated with the</u>

<u>destination address of the received data frame;</u>

<u>logic to associate in the data structure the destination address of the received</u>

<u>data frame with a transmitting port of the switching fabric based upon the destination</u>

<u>data switch; and</u>

<u>logic to suspend a transition for transmission of subsequent data frames to the</u>

<u>destination address through a data path including the transmitting port to ensure a delay</u>

<u>from a transmission of a last data frame according to the spanning tree protocol to a</u>

<u>transmission of a first data frame through the data path</u>.

Claim 20 (currently amended): The data network of claim 19, wherein the source

data switch further comprises~~:~~

~~logic to associate the destination address of the received data frame with a~~

~~destination data switch; and~~

logic to select a <u>the associated one of a</u> port ~~from the~~ <u>and</u> aggregation of ports

~~based upon the destination data switch~~ for transmission of the received data frame <u>to</u>

<u>the destination data switch if a match is determined</u>.

Claim 21 (currently amended): The data network of claim ~~19~~ <u>20</u>, wherein the

source data switch further comprises logic to select a <u>one</u> port in the aggregation of

ports for transmission of the received data frame based upon one of ~~a~~ <u>the</u> destination

address and a source address of the received data frame.

Claim 22 (cancelled).

Claim 23 (cancelled).


Claim 24 (cancelled).


Claim 25 (currently amended):  An article comprising:

a storage medium comprising machine-readable instructions stored thereon for:

maintaining a data structure associating each of a plurality of destination

addresses of discovered MAC devices with one of a port and an aggregation of

ports of a receiving data switch;

detecting receipt of a data frame at a first port of a switching fabric, the

switching fabric having a plurality of ports, the data frame having a destination

address associated with a destination MAC device coupled to the switching fabric

through a mesh of data switches at a destination data switch;

comparing the destination address of the received data frame with the

data structure to determine a match with an associated one of a port and

aggregation of ports;

transmitting the received data frame through the mesh of data switches

according to a spanning tree protocol if no match is determined; and

~~selecting a port in the aggregation of ports for transmitting the data frame to~~

~~the destination data switch if the destination address is matched with the~~

~~aggregation of ports~~

receiving a message specifying a destination data switch associated with

the destination address of the received data frame;

associating in a data structure the destination address of the received data frame with a transmitting port of the switching fabric based upon the destination data switch; and

suspending a transition for transmission of subsequent data frames to the destination address of the received data frame through a data path including the transmitting port to ensure a delay from a transmission of a last data frame according to the spanning tree protocol to a transmission of a first data frame through the data path.

Claim 26 (currently amended): The article of claim 25, wherein the storage medium further comprises machine-readable instructions stored thereon for:

associating the destination address of the received data frame with a destination data switch; and

selecting a port from the associated one of a port and aggregation of ports for transmitting the received data frame to based upon the destination data switch for transmission of the received data frame if the destination address is matched with the aggregation of ports.

Claim 27 (currently amended): The article of claim 25, wherein the storage medium further comprises machine-readable instructions stored thereon for selecting a one port in the aggregation of ports for transmission of the received data frame based upon one of a the destination address and a source address of the received data frame.

Claim 28 (cancelled).


Claim 29 (cancelled).


Claim 30 (cancelled).